### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization International Bureau



## | 1840 | 1831 | 1831 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 1830 | 183

# (43) International Publication Date 17 June 2004 (17.06.2004)

**PCT** 

# (10) International Publication Number WO 2004/049937 A1

(51) International Patent Classification<sup>7</sup>: A61B 5/053, 5/103

(21) International Application Number:

PCT/IB2003/006399

- (22) International Filing Date: 5 December 2003 (05.12.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0228375.2

5 December 2002 (05.12.2002) GB

- (71) Applicant (for all designated States except US): UNIVER-SITY OF ULSTER [GB/GB]; Cromore Road, Cleraine, Co. Londonderry BT52 1SA (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): McADAMS, Eric, Thomas [GB/GB]; Ormsdale, 52 Cable Road, Whitehead, County Antrim BT38 9PZ (GB).
- (74) Agents: CASEY, Lindsay, Joseph et al.; F. R. Kelly & Co., 27 Clyde Road, Ballsbridge, Dublin 4 (IE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,

MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

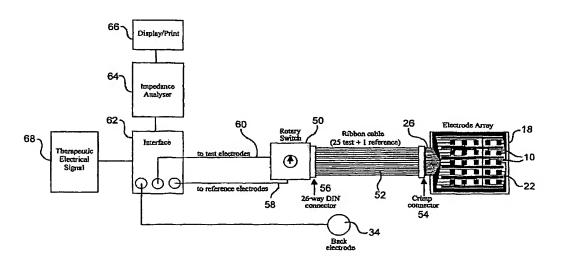
(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declarations under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

[Continued on next page]

(54) Title: TISSUE MAPPING SYSTEM AND METHOD



(57) Abstract: A tissue mapping system comprising a two dimensional array of test electrodes 10 for application to the surface of tissue under investigation and circuit means 50-66 for measuring an electrical characteristic of the tissue underlying each test electrode. In one embodiment the electrical characteristics is the impedance of the tissue underlying each test electrode.

## WO 2004/049937 A1



— of inventorship (Rule 4.17(iv)) for US only

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.